Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services	)	CC Docket No. 92-297

Sixth Notice of Proposed Rule Making

Adopted: December 1, 1999 **Released:** December 13, 1999

Comments Due: January 21, 2000

Reply Comments Due: February 11, 2000

By the Commission: Commissioners Furchtgott-Roth and Powell dissenting and issuing separate statements.

I. Introduction

1. We seek comment in this notice on whether we should allow the eligibility restriction for the Local Multipoint Distribution Service (LMDS) to sunset on June 30, 2000, or whether we should extend the restriction. The LMDS eligibility restriction prohibits an incumbent local exchange carrier (LEC) or incumbent cable company, or any entity with an attributable interest in these incumbents, from having an attributable interest in an LMDS license whose geographic service area significantly overlaps the incumbent's service area.[1] The LMDS eligibility rule sunsets on June 30, 2000, unless the Commission extends the rule upon a determination that the

[1] 47 C.F.R. § 101.1003(a).

incumbent LECs or incumbent cable companies "continue to have substantial market power in the provision of local telephony or cable television services."[2]

2. After a brief review of our LMDS rules and the reasons underlying the establishment of our LMDS eligibility rule, we examine the current level of competition in local exchange services and multi-channel video programming distribution (MVPD) services. We then discuss the status of LMDS deployment and seek comment on issues relating to the sunset of the LMDS eligibility restriction.

II. The LMDS Allocation and the LMDS Ownership Rules

3. On March 13, 1997, the Commission allocated 1,300 MHz of spectrum per basic trading area for LMDS.[3] The LMDS allocation consists of two primary blocks of spectrum.[4] The A block allocation comprises: 850 MHz at 27.5 GHz, 150 MHz at 29 GHz, and 150 MHz at 31 GHz. The B block allocation consists of 150 MHz at 31 GHz. The LMDS allocation is unusual in both the size of the allocation and the extent to which the spectrum is unencumbered.[5]

4. At the time the Commission released its final rules in 1997, it assumed that the LMDS spectrum allocation provided the Commission with a rare opportunity to enable the creation of a facilities-based provider of local exchange services, MVPD services, broadband data services, or all of the above.[6] The Commission found that the LMDS A block would provide the licensee with sufficient capacity to offer both local exchange services and MVPD services.[7]

5. Many commenters, including seventeen state Attorneys General, the United States Department of Justice and the Federal Trade Commission, argued in the LMDS proceeding that

---

[2] 47 C.F.R. § 101.1003(a)(1).

[3] *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 GHz Frequency Band, To Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies For Local Multipoint Distrisbution Service and For Fixed Satellite Services*, CC Docket 92-297, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking* 12 FCC Rcd 12545 (1997) (*Second Report*) at 12556 (para. 13).

[4] 47 C.F.R. § 101.1005(a).

[5] *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 GHz Frequency Band, To Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies For Local Multipoint Distribution Service and For Fixed Satellite Services*, CC Docket 92-297, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking* 12 FCC Rcd 12545 (1997) (*Second Report*) at 12622 (para. 173).

[6] *Second Report*, 12 FCC Rcd at 12610 (para. 149), 12618-9 (para. 165), and 12621 (para. 170).

[7] *Id.*, at 12553-4 (para. 2). At the time of the rulemaking, Cellularvision was using 1000 MHz of this spectrum to provide video distribution services in New York City, and it had announced plans to offer telecommunications services in this market. In 1998, Cellularvision experienced significant financial difficulties that led to layoffs and a "de-emphasis" on subscription television services. As of September 1998, Cellularvision had 2,000 subscribers. Winstar purchased 850 MHz of Cellularvision's assigned spectrum in New York. Cellularvision was reorganized under the name SpeedUS.COM and plans to use the spectrum to provide consumers high speed internet access. *Id.*, at 12553-4 (paras. 5-6) and 12621 (para. 170), and Cellularvision Quarterly Report, 10-Q, November 16, 1998.

the Commission should establish ownership rules to prohibit the incumbent LEC or cable company from acquiring LMDS spectrum in its service area.[8] Because of the unique circumstances surrounding the allocation of this spectrum and the Commission's vision of its potential uses, the Commission imposed an ownership eligibility rule prohibiting incumbent LECs or cable companies from having an attributable interest in the LMDS A block license that overlaps with ten percent or more of the population in their service areas.[9]

6. In establishing the eligibility rule, the Commission considered four factors.[10] First, the Commission assessed the most likely uses for LMDS. The Commission found that LMDS was a likely vehicle for the provision of local telephony, MVPD service, or both.[11]

7. Second, the Commission considered the current market structure for local exchange services and MVPD services, and whether the incumbent operators in these markets would have the incentive to attempt to forestall competition in their respective markets. The Commission found that both incumbent LECs and cable companies were dominant operators in their respective markets. Thus, they "would have a strong incentive to obtain an LMDS license in order to prevent a new entrant from obtaining the license and competing directly in the incumbent's current market."[12] The Commission also found that these incumbents would have no incentive to use the LMDS spectrum to offer services that would compete with their own services in-region. The Commission had concern that if the incumbents had an attributable interest in the A block LMDS license, and if the most efficient use of the LMDS allocation is the provision of local telephony or MVPD, then permitting the incumbents to own this spectrum could skew the use of LMDS toward a less efficient use, and diminish the prospects for the LMDS allocation to provide competitive services in local telephony or MVPD.[13]

8. Third, the Commission considered whether an eligibility restriction would be the best means to promote competition. The Commission determined that a short-term, rather than long-term, eligibility restriction would be the best means to increase competition in the two consumer markets of local telephony and MVPD.[14] At the time it adopted the eligibility rule, the Commission believed that there would be sufficient entry and increases in competition in these markets to permit the sunset of the eligibility restriction three years after the effective date of the rule.[15] The Commission, however, also concluded that, "it is unlikely that a meaningful increase

[8] *Second Report*, 12 FCC Rcd at 12612-12613 (paras. 154-155).

[9] 47 C.F.R. § 101.1003(d).

[10] *Second Report*, 12 FCC Rcd at 12614-26.

[11] *Id.*, at 12621-23 (paras. 170-175). At the time of the adoption of the final rules, the Commission decided against use restrictions because the Commission did not know whether local telephone, video, or something else would be the best use of the LMDS spectrum and the Commission had concern that a use restriction could substantially harm the efficient use of this spectrum. *Id.* at 12623 (para.176).

[12] *Id.*, at 12617-21 (paras. 162-169).

[13] *Id.*, at 12621-23 (paras. 170, 173-175).

[14] *Id.*, at 12623-26 (paras. 176-181).

[15] *Id.*, at 12633 (para. 198).

in competition will evolve over the time it will take to license, construct, and begin service on LMDS systems."[16] Thus, the Commission determined that it would review the need for the eligibility rule in 2000 to determine whether competition for local telephony services and MVPD services were sufficiently developed to allow the sunset of the rule.[17]

9. Fourth, the Commission considered whether there were efficiencies that would be forfeited if the LMDS spectrum were operated by any class of providers other than the incumbent cable operators and local exchange carriers.[18] The Commission concluded that no substantive evidence of economies of scope or other efficiencies arising from ownership of an LMDS system by an incumbent LEC or cable provider had been presented to the Commission. Thus, the Commission found that efficiencies would not be sacrificed by a temporary eligibility restriction.[19]

10. The Commission has elaborated on its reasoning for the LMDS eligibility restriction in two subsequent orders. First, in its 1997 order allocating 700 MHz at 39 GHz, the Commission assumed the 39 GHz allocation would be used: to provide backhaul or backbone communication links; to provide services for wireless local loops; to provide call termination or origination services to interexchange carriers (IXC); to provide a connection to a fiber ring; to provide Internet access; or to provide cable head-end applications.[20] The Commission decided not to establish a similar eligibility restriction for 39 GHz, in part, because of the existence of the LMDS eligibility restriction.[21] In addition, the Commission concluded that eligibility restrictions for 39 GHz were unnecessary because it would be implausible for an incumbent LEC to pursue a strategy of buying 39 GHz licenses to foreclose competition in local exchange services or some other market.[22] The Commission based this conclusion on two observations: (1) the most likely use of this spectrum, the backhaul and backbone transmission market, is generally competitive; and (2) there were many actual and potential competitors, including other 39 GHz licensees, new wireline entrants, and other wireless providers, that could provide local exchange services. The Commission also noted that its band plan envisioned an increase in the amount of unencumbered spectrum and that the LMDS eligibility restriction would prevent an in-region LEC from acquiring the LMDS licenses for three years, thus ensuring at least one new competitor in each geographic market. The Commission reasoned that because only one large-block LMDS license is available in each geographic area, while fourteen 39 GHz licenses are available in each geographic area, the LMDS allocation differed from the 39 GHz allocation in both the LMDS

[16] *Id.*, at 12618 (para. 164).

[17] *Id.*, at 12633 (para. 198).

[18] *Id.*, at 12615 (para. 159).

[19] *Id.*, at 12624 (para. 177).

[20] *Amendment of The Commission's Rules Regarding The 37.0-38.6 GHz And 38.6-40.0 GHz Bands*, ET Docket No. 95-183, RM-8553, *Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz*, PP Docket No. 93-253, (1997) *Report and Order and Second Notice of Proposed Rule Making*, 12 FCC Rcd 18600 (*39 GHz Report and Order)* at 18607 (para 5).

[21] *Id.*, at 18619-20 (paras. 33-34).

[22] *Id.*, at 18619-20 (para. 33).

allocation's unusually large size and extent to which it is unencumbered.[23] Therefore, "39 GHz licenses are less likely than LMDS licenses to be acquired by incumbent LECs for anticompetitive motives."[24]

11. Second, in a February 1998 order, the Commission noted that, "even after the termination of the eligibility restrictions, the Commission's rules relating to the assignment and transfer of LMDS licenses will provide us with an effective tool to ensure that proposed license acquisitions by incumbent LECs or cable operators will not, in particular cases, be inconsistent with the pro-competitive policies that guide our licensing of LMDS and that led to our establishment of the eligibility restrictions."[25] The factors the Commission would consider to assess whether the market was sufficiently competitive to permit the transfer of LMDS licenses include: the number and capacity of facilities-based providers, the substitutability of the services offered by these providers, and the regulatory environment for competing providers in the relevant geographic market.[26]

12. The Commission's decision to impose the LMDS eligibility restriction was challenged by several parties, most notably incumbent LECs arguing that the decision to restrict ownership for a period of time was arbitrary and capricious.[27] The United States Court of Appeals for the District of Columbia Circuit affirmed the Commission's decision.[28] The court concluded that the Commission had adequately explained any departure from prior precedent by differentiating LMDS from prior spectrum where LECs had been able to acquire licenses. In the case of LMDS, the court accepted the Commission's explanation that individual large licenses were allocated in each geographic area and the amount of spectrum was sufficient to support delivery of multiple services in competition with existing monopolies, and that the development of such competition was a particularly important objective in light of the Telecommunications Act of 1996.[29] The court also found the Commission's decision to be supported by the factual record and market analysis, particularly since the Commission's role as an expert agency requires it to make predictive judgments.[30]

[23] *Id.*, at 18616-17, 18620 (paras. 27-28, 34).

[24] *Id.*, at 18620 (para. 34).

[25] *Third Reconsideration*, 13 FCC Rcd at 4906-7 (para. 114).

[26] *Id.*

[27] Petitions for review included: James L. Melcher et al.; United States Telephone Association; US West; and National Telephone Cooperative Association. *Melcher v. FCC*, 134 F.3d 1143 (D.C. Cir. 1998).

[28] *Melcher v. FCC*, 134 F.3d 1143 (D.C. Cir. 1998).

[29] *Id.* at 1149-50.

[30] *Id.* at 1150-52.

III. The State of Competition in Local Telephony and MVPD

A. Local Exchange Services

13. Over the course of the past two years, we have concluded numerous times that the incumbent local exchange carriers (ILECs) continue to hold a dominant position in the provision of local exchange services. We have found that the ILECs are the sole providers of local exchange and exchange access services to the vast majority of residential and small business customers in most areas in the U.S.[31] Moreover, we have found that the ILECs continue to dominate the large business market for these services,[32] even as the ILECs are facing increasing competition from numerous new entrants that are building facilities as they seek to provide services to larger business customers.[33]

14. Recent *Local Competition* and *Telephone Trends* reports indicate that, while competition has increased in local telephony since adoption of the LMDS eligibility restriction, the ILECs' competitors have experienced only modest gains in their market position.[34] The gains made by these competitors to date can be assessed by the local competitors' share of local service revenues, their share of total switched access lines in service to customers, and their use of the incumbents' facilities and services. In addition, their potential to gain market share in the future can be assessed by information about their ability to expand service, including control over numbering resources and the build-out of their own facilities.

15. An examination of estimated nationwide local service revenues and switched access lines indicates that, while the competitors to the ILECs have increased their penetration since the establishment of the LMDS eligibility restriction, these competitors, on the whole, continue to

---

[31] *Applications of Teleport Communications Group, Inc., Transferor, and AT&T Corporation, Transferee,* CC Docket No. 98-24, *Memorandum Opinion and Order*, 13 FCC 15236 (1998) at 15249 (para. 26) *(citing Trends in Telephone Service* (Feb. 1998) at 32.

[32] *Applications of Teleport Communications Group, Inc., Transferor, and AT&T Corporation, Transferee,* CC Docket No. 98-24, *Memorandum Opinion and Order*, 13 FCC 15236 (1998) *(AT&T Teleport Order)* at 15249 (para. 26); *Application for Consent To the Transfer of Control of Licenses and Section 214 Authorizations from Southern New England Telecommunications Corp., Transferor To SBC Communications, Inc. Transferee*, CC Docket. No. 98-25. *Memorandum Opinion and Order*, 13 FCC 21292 (1998) *(SBC SNET Order)* at 21300-1 (para. 18); *Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.*, CC Docket No. 970211, *Memorandum Opinion and Order*, 13 FCC Rcd. 18025 (1998) *(MCI WorldCom Order)* at 18120-30 (paras. 168-187). *In re Applications of Ameritech Corp., Transferor, and SBC Communications Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission's Rules* (para. 25).

[33] *AT&T Teleport Order* at 15259 (paras. 26-27). *SBC SNET Order* at 21301 (para. 20). *MCI WorldCom Order* at 18129-30 (paras. 185-187).

[34] *Local Competition Report*, Common Carrier Bureau, Industry Analysis Division, August 1999, (*Local Competition Report)* at 1; *Trends in Telephone Service*, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, September 1999, (*Telephone Trends)* at 9-1. The competitors include competitive access providers (CAPs), CLECs, local resellers, shared tenant, private carriers and other local carriers.

maintain only a small share of the local exchange service market, and are relegated mainly to serving small- and medium-sized businesses and multiple dwelling units, as opposed to single-family residences.[35] On a nationwide basis, the *Local Competition Report* estimates the ILECs' competitors have increased their share of the local service revenues from 1.0% in 1996 to 2.3% in 1997 to 3.5% in 1998.[36] Merrill Lynch reports similar estimates for the local competitors' market share of switched revenues. Merrill Lynch estimates that the competitors' share of the local switched revenues grew from 2.7%, as of the fourth quarter of 1997, to 4.9% as of the fourth quarter of 1998.[37] The investment community estimates that local competitors held about 3% of all of the switched access lines in the U.S, 7% of the U.S. business switched access lines, and 1% of the U.S. residential switched access lines.[38]

16. The extent to which the CLECs and other competitors are using the ILECs' facilities is an alternative indicator of the local competitors' penetration into the ILECs' market. The Commission collects some relevant data from large ILECs, has conducted five surveys of ILECs and CLECs in a voluntary program that is now concluded[39], and has issued a Notice of Proposed Rulemaking inviting comments on a mandatory data collection program.[40] Table 1 reports the estimates of the ILECs' competitors' penetration into the market using ILEC facilities and services, which were derived from the voluntary surveys, and provides some indication of the primary market segments sought by these competitors.

[35] *Local Competition Report at 11-19.*

[36] *Local Competition Report* at Table 2.1.

[37] Merrill Lynch, *Telecom Services – Local,* September 8, 1999, Table 8.

[38] Bernstein Research, *MCI World.com*, March 1999 at 75-76; Merrill Lynch, *Telecom Services – Local*, September 8, 1999 at 8. CIBC Oppenheimer estimates CLECs had a 5.5 percent share of business lines in 1998, up from a 3% share in 1997. CIBC Oppenheimer Equity Research, *Telecom Strategy and Handbook*, February 23, 1998, at 15. Merrill Lynch's figures convert high-speed lines to access lines equivalents (see Merrill Lynch, *Telecom Services*, June 12, 1998). One Paine Webber source estimates that the largest 20 CLECs have 7.8% of the U.S. business lines, while another estimates that CLECs have more than 6.5% of the business lines in the U.S. Paine Webber, *CLECS 4th Quarter Review*, March 22, 1999, at 2; Paine Webber Equity Research, *Without A Net*, March 1999 at 1. The voluntary surveys the Commission conducts do not provide comprehensive information about the number of customer lines that CLECs provide solely over their own facilities.

[39] The Commission has conducted five voluntary surveys of CLECs and ILECs. The format of this survey has changed over time. See http://www.fcc.gov/ccb/local_competition.

[40] *In the Matter of Local Competition and Broadband Reporting*, CC Docket 99-301, FCC 99-283 (rel. Oct. 22, 1999).

Table 1: Lines Provided by Large ILECs to CLECs for Resale

As of December 31, 1997				As of December 31, 1998			
Total Switched Lines (thousands)	Resold Lines on Total Service Resale Basis (thousands) (Percent of Lines)		UNE Loops (thousands) (Percent of Lines)	Total Switched Lines (thousands)	Resold Lines on Total Service Resale Basis (thousands) (Percent of Lines)		UNE Loops (thousands) (Percent of Lines)
159,008	1,743 (1.1%)		133 (0.1%)	164,614	2,738 (1.7%)		361 (.2%)
	Residential	Other			Residential	Other	
	NA	NA			1,215 (44%)	1,523 (56%)	

Source: *Local Competition Report*, Tables 3.1, 3.2, and 3.3, August 1999. NA: Not available. UNE Loop: Local Unbundled Network Element Loops

17. The figures reported in Table 1 indicate that the absolute number of local unbundled network element (UNE) loops controlled by the competitors almost tripled from December 1997 to December 1998, from 133 thousand to 361 thousand, but remained small as a percent of total ILEC switched lines. Over this time period, the number of resold lines provided by ILECs on a Total Service Resale Basis increased from 1.7 million to 2.7 million. Of those resold lines, about 44% (representing about 0.7% of total switched ILEC lines) were being used to serve CLEC residential customers, and about 56% (representing about 0.9% of total switched ILEC lines) were being used to serve other CLEC customers. Additionally, at the end of 1998, competitors were making use of about 324 thousand ILEC lines (representing about 0.2% of total switched ILEC lines) obtained under resale arrangements other than Total Service Resale.[41]

18. The data reported in Table 2 below summarize the characteristics of the switch centers in which the ILECs' competitors have collocation arrangements. These figures suggest that these firms are more active in the non-residential market. Table 2 reports that, as of December 31, 1998, the ILECs' competitors have collocation agreements in switching centers which serve 58.3 percent of the ILECs' non-residential lines. These switching centers serve 42.2 percent of residential lines. These figures suggest that these competitors appear to be focusing their efforts on business and government customers.

Table 2: Percentage of ILEC Lines Served by Switching Centers Where New Entrants Have Collocation Arrangements

As of December 31, 1997		As of December 31, 1998	
Residential	Other	Residential	Other
23.3%	41.4%	42.2%	58.3%

Source: *Local Competition Report*, August 1999, Table 3.4.

[41] *Local Competition Report*, Table 3.1. The voluntary surveys do not provide reliable data about the split of these other resale (e.g., Centrex services resale) lines between CLEC residential and other customers.

19. In addition to these indicators of the extent to which competitors of ILECs are now serving customers, information about numbering resources[42] and fiber optic system capacity in place sheds light on the potential for competitors to increase market share in the future. Numbering codes (technically, central office or NXX codes) are used to route and rate switched telephone traffic within the nationwide network. Prior to beginning operation as a facilities-based local service competitor, a firm with a telephone switch must acquire a numbering code.

20. Table 3 reports that the number of local service competitors with numbering codes has substantially increased since the LMDS eligibility rule was established. Nationwide, the number of CLECs with a single numbering code has increased from 90 carriers in 1997 to 158 carriers in 2nd Quarter 1999, a 75 percent increase.

Table 3: Local Service Competitors Holding Numbering Codes

	Nationwide	State*
4th Quarter 1997	90	296
4th Quarter 1998	150	441
2nd Quarter 1999	158	470
**Local Competition Report*, August 1999, Table 4.1.		

21. The *Competition Report* also found that there is a significant variation in the entry of new local competitors across the U.S. As of June 30, 1998, only 18 of the nation's 193 LATAs had no CLECs with numbering codes.[43] Twenty LATAs now have 10 or more CLECs with codes, and 62 LATAs have 5 or more such CLECs.[44] West Virginia, which previously had been the only state in which no CLEC held a numbering code, witnessed the entry of one CLEC in 4th Quarter 1998.[45]

22. Another way of looking at this numbering code information is to consider the share of numbering codes assigned to ILECs' competitors. Numbering codes are assigned in a block of 10,000 numbers. The share of codes assigned to the ILECs' competitors in the second quarter of 1999 was 20%, up from 17% in the fourth quarter of 1998, and from 8% in the third quarter of 1997.[46]

23. Finally, the potential of ILECs' competitors to gain market share in the future also can be assessed by information about the build-out of their own facilities. The Local Competition Report estimates that the competitive access providers' fiber grew from 1.3 million

[42] One cannot infer whether a CLEC is providing service or the size of its customer base by the number of numbering codes it has.

[43] A LATA is a local access and transport area. It delineates the geographical area within which Regional Bell Operating Companies may offer services. *Local Competition Report* at 4.

[44] *Local Competition Report* at 44.

[45] *Local Competition Report* at 45.

[46] *Local Competition Report*, Table 4.3 at 66.

fiber miles in 1996 to 1.8 million fiber miles in 1997 to 3.1 million fiber miles in 1998.[47] Over this same time period, the ILECs increased their fiber from 12.3 million fiber miles to 16.1 million fiber miles.[48] At the end of 1998, therefore, competitors had at least 16% of the total fiber-optic system capacity potentially available to carry calls within local telecommunications markets and to deliver calls to long distance carriers.[49]

24. In sum, the data reported above indicate that, while competition has increased in the local exchange and local exchange access markets, the ILECs continue to hold a dominant position in the provision of these services.

B. MultiChannel Video Programming Distribution Services

25. We recently found that, while competition in MVPD services has increased, cable television providers continue to hold a dominant position in this market.[50] Table 4 presents figures based on nationwide data (which cannot be used to infer the extent of competition in individual local markets).[51] These figures indicate that, nationwide, more than 85% of MVPD service consumers receive services by a cable company and that, as a group, cable companies have lost fewer than 2% of the MPVD service consumers since the Commission established the LMDS eligibility rule.[52] Satellite Master Antenna TV (SMATV) which uses some of the same technology as cable systems but does not use public rights-of-way, has a 1.2% market share. The nationwide market share for Direct-To-Home (DTH) satellite services (Direct Broadcast Satellite Service (DBS) and Home Satellite Dish (HSD)) has increased from 9.8% to 12%, with most of the increase occurring for DBS.[53] Wireless Cable operators, who use spectrum in the

[47] *Local Competition Report, Chart 2.1 at 15.*

[48] *Id.*

[49] *Id.* The number of fiber miles includes both lit and dark fiber. The number of fiber miles is the number of miles of fiber cable multiplied by the number of fiber strands.

[50] *Annual Assessment of the Status of Competition in Markets For the Delivery of Video Programming,* CS Docket No. 98-102, *Fifth Annual Report*, 13 FCC Rcd. 24284 (1998) (*Fifth Annual Report).*

[51] *Id.*, at 24287 (para. 6).

[52] These nationwide figures, however, most likely mask differences in the level of penetration of DTH in cable operators' individual local markets. To more accurately assess the state of competition at the local level, we analyzed statewide subscriber counts as reported by *Sky Repor t Sky Report*, July 1, 1997, and July 1, 1999. The newsletter is produced by Media Business Corp, 807 Arapahoe Street, Golden, CO, 80401). The figures reported in Table 5 are compiled from statewide subscriber counts for basic cable and DTH satellite services as reported in *Sky Report.* There are a number of caveats to these results. First, these results have not been adjusted for the ability of the consumer to actually have the option of purchasing either cable or satellite service, *i.e.*, whether the consumer's home is passed by a cable system or whether the consumer's house could receive an unobstructed signal from the satellite. Second, there is insufficient information to determine whether the typical DTH subscriber primarily resides in a state's rural areas, while the typical cable subscriber primarily resides in a state's urban areas. Third, the figures for cable penetration reported in Table 5 have a slight upward bias, to the extent that consumers in some local markets within these states have the option of subscribing to a cable overbuilder, or a provider of OVS, MMDS, or SMATV.

[53] *Id.*, at 24289 (para.12).

Multichannel Multipoint Distribution Service (MMDS)[54] supplemented with leased spectrum from the Instructional Television Fixed Service (ITFS), have a 1.3% market share, and Open Video Systems (OVS) have a market share less than 1%.

Table 4: Nationwide Market Share for MVPD Services

	Cable (%)	MMDS (%)	SMATV (%)	HSD (%)	DBS (%)	OVS (%)
As of June 1998	85.34%	1.30%	1.23%	2.65%	9.40%	0.09%
As of June 1997	87.10%	1.49%	1.58%	2.97%	6.85%	0.00%
As of June 1996	87.74%	1.24%	1.56%	3.15%	5.92%	0.00%

Source: *Fifth Annual Report*, Appendix C, Table C-1. HSD: Home Satellite Dishes; DBS: Direct Broadcast Satellite Services; MMDS: Multichannel Multipoint Distribution Services; SMATV: Satellite Master Antenna Television.

Table 5: Analysis of Statewide Subscription for Cable and DTH Satellite Services

	As of July 1, 1997		As of July 1, 1999	
	CS / (CS + DS)	DS / TV HHs	CS / (CS + DS)	DS / TV HHs
Nationwide	89.03%	7.83%	83.51%	12.75%
State Data				
Minimum	69.04%	0.47%	58.79%	0.69%
Maximum	99.54%	23.58%	99.34%	36.19%
Average	86.69%	9.75%	80.64%	15.24%
Standard Deviation	6.17%	4.84%	8.11%	6.86%

Notes: CS: Basic Cable Subscribers; DS: DTH subscribers for DirecTV/USSC, EchoStar, Primestar, and C-Band; TV HHs: TV Households. The ratio CS/(CS +DS) underestimates cable's share of MVPD subscribers because we do not have statewide data on subscribers to OVS, SMATV and MMDS. DTH penetration is measured by the ratio DS/(TV HHs). The figures are calculated from statewide data reported in *Sky Report*. For both 1997 and 1999, Montana has the highest penetration of DTH service and the lowest proportion of subscribers on a cable system. Similarly, for both 1997 and 1999, Hawaii has the lowest penetration of DTH service and the highest proportion of subscribers on a cable system. Source: *Sky Report*, July 1, 1997, and July 1, 1999.

26. Although DTH providers have significantly increased their market penetration since 1997, there is a substantial variation in the penetration of DTH services across the U.S. The data reported by *Sky Report* suggest that the nationwide DTH penetration rate has increased from 7.8% in July 1997 to 12.8% in July 1999.[55] As of July 1, 1999, however, the statewide penetration of DTH services ranged from less than 1% to more than 35%. On average, the statewide penetration rate is approximately 15%. Over the past two years, the proportion of subscribers to cable services relative to subscribers to cable and DTH services has fallen from

[54] Unless otherwise indicated, MMDS includes single-channel Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) collectively.

[55] As of June 9, DirecTV reports that it has 5.1 million subscribers, a 300,000 increase in its subscriber count over the figures used in Table 5. COMMUNICATIONS DAILY, June 9, 1999, Vol. 19, No. 110.

approximately 90% to approximately 84%. Appendix A reports penetration rate and market share figures for each state.

27. We, however, anticipate that DTH will be able to compete more effectively with cable services as DTH services become a closer substitute for cable services.[56] Both the House and Senate recently passed legislation that, if enacted, should increase the ability of the satellite MPVD service providers to provide local programming and thereby provide more effective competition against cable MPVD service providers. On April 28, 1999, the House passed the Satellite Copyright, Competition and Consumer Protection Act of 1999, and on May 20, 1999, the Senate amended and passed the Satellite Home Viewers Improvement Act.[57] The Bill was signed into law on November 29, 1999.[58] In anticipation of the change in the law, DirecTV is reported to have entered into tentative agreements to provide local programming in New York City and Los Angeles and has plans to expand its local programming offerings to 25 markets.[59]

28. The Commission has also found that LECs are entering the MVPD services market and that the penetration in some markets is becoming significant.[60] As of June 1998, "competing franchises have been awarded in 149 communities in twenty-one states with the potential to pass 7.2 million homes."[61] For example, as of December 1998, Ameritech had 200,000 subscribers.[62]

29. Moreover, our *Report on Cable Industry Prices* this past spring reports there are 246 communities designated as effectively competitive.[63] The Commission collected information

---

[56] *Fifth Annual Report* 13 FCC Rcd. at 24324 (para. 63).

[57] H.R. 1554, A bill to amend the provisions of Title 17, U.S.C, and the Communications Acts of 1934, relating to copyright licensing and carriage of broadcast signals by satellite. Search for H.R. 1554 at:http://thomas.loc.gov

[58] HR 3194 was signed into law on November 29, 1999. Pub. Law 106-113, 113 Stat. 1501, approved 11/29/99.

[59] *Id.*

[60] *Fifth Annual Report* at 24290 (para. 12).

[61] *Id.*, at 24308 (para. 43).

[62] *Id.*

[63] *In the Matter of Implementation of Section 3 of the Cable Television Consumer Protection Act of 1992, Statistical Report on Average Rates for Basic Service, Cable Programming Services, and Equipment,* MM Docket No. 92-266, *Report on Cable Industry Prices,* released May 5, 1999, *(Report on Cable Industry Prices)* at 5 (para. 11). Community is synonymous with CUID, the community unit identification number (CUID). Effective competition exists: (1) where the franchise area is served by at least two unaffiliated MVPDs, each of which offers comparable video programming to at least 50% of households, and at least 15% of households subscribing to programming services offered by an MVPD subscribe to services other than those offered by the largest MVPD (referred to herein as head-to-head competition or the "overbuild" test); (2) where fewer than 30% of the households in the franchise area subscribe to the cable service of a cable system (the "low penetration" test); or (3) where a municipal cable system offers service to at least 50% of the households in the franchise area (the "municipal" test). Communications Act, § 623(l)(1)(A)(B)(C), 47 U.S.C. § 543(l)(1)(A)(B)(C). The Telecommunications Act of 1996 found that effective competition also exists where the LEC or its affiliate (or any MVPD using the facilities of such carrier or its affiliate) offers video programming services (other than DTH satellite services) in the franchise area of an unaffiliated cable operator, but only if the services so offered are comparable to the services provided by the cable operator (the "LEC" test). Communications Act, § 623(l)(1)(D), 47 U.S.C. § 543(l)(1)(D). This new standard has been applicable since February 8, 1996.

from these communities, and randomly surveyed the non-effectively competitive communities.[64] Approximately 1.1 million cable subscribers (1.7% of all cable subscribers) reside in the aforementioned 246 communities; however, there is head-to-head competition between at least two cable providers in only 88 of these communities. Table 6 reports the average monthly charge for cable services in both competitive and non-competitive markets. The figures reported in Table 6 indicate that the average monthly charge for cable services is significantly less in those communities in which there are at least two MVPD service providers.

Table 6: A Comparison of Communities Where The Incumbent MVPD Service Provider Faces Competition From Another Wireline MVPD Provider and Where the Incumbent MVPD Service Provider Does Not Face Competition From Another MVPD Provider

Year	Noncompetitive Markets	Markets Fulfilling The LEC Test*	Markets Fulfilling The Overbuild Test*
Average Monthly Charge			
1998	$30.53	$26.78	$26.79
1997	$28.56	$26.21	$24.47
1996	$26.21	$24.45	$22.01
Number of Communities			
1998	461	59	29
1997	510	50	27
1996	535	5	18
Number of Subscribers			
1998	12,981,027	523,224	163,092
1997	12,718,831	505,671	153,842
1996	12,643,284	148,779	95,918

Source: *Report on Cable Industry Prices*, Attachment C-5, and data provided by the Cable Services Bureau.
*The Overbuild Test is fulfilled where the franchise area is served by at least two unaffiliated MVPDs, each of which offers comparable video programming to at least 50% of households, and at least 15% of households subscribing to programming services offered by an MVPD subscribe to services other than those offered by the largest MVPD. The LEC test is fulfilled where a LEC or its affiliate (or any MVPD using the facilities of such carrier or its affiliate) offers video programming services (other than DTH satellite services) in the franchise area of an unaffiliated cable operator, and the services are comparable to the services provided by the cable operator. The Communications Act, § 623(l)(1)(B)-(D).

30. In summary, while there has been increased entry into the MVPD services market, the incumbents continue to hold dominant positions.

IV. Deployment of LMDS

31. When the Commission initially adopted the eligibility restriction, there was only one LMDS operator, Cellularvision, which was providing MVPD service in the Brooklyn, New York, area. Cellularvision is no longer operating as an MVPD provider. It transferred 850 MHz

[64] *Report on Cable Industry Prices* at 5 (para. 11).

of its spectrum holdings to WINSTAR in November 1998.[65] Thereafter, Cellularvision reformed as SpeedUS.Com and will offer high-speed data access with the 150 MHz it retained.[66] The remaining LMDS licenses were distributed in two auctions. The first, conducted February 18 through March 25, 1998, awarded 279 A-block and 485 B-block licenses for net bids totaling more than $278 million.[67] To dispose of unsold licenses, the second auction was conducted April 27 through May 12, 1999, and awarded 121 A-block and 40 B-block licenses for net bids totaling more than $45 million.[68] The willingness of LMDS licensees to bid large sums demonstrates a substantial and probable market for LMDS.

32. Because the first LMDS products are just becoming available in the United States, LMDS is a nascent market whose evolution is uncertain. For example, our research reveals that a significant number of LMDS licensees might use their spectrum to offer broadband services.[69] Specifically, in the near term, LMDS may be used primarily to provide high-speed data and Internet services to small and medium-sized businesses rather than to provide services, especially MVPD services, to single-family residences. Possible other services include: video conferencing, tele-medicine, distance learning, closed-circuit applications, and backhaul or backbone applications. An industry segment aiming to provide service akin to typical landline service (including lifeline telephone service with directory assistance) has yet to emerge though. CLEC holders of LMDS licenses plan to bundle local exchange services with high-speed data and Internet access services.

33. A number of factors may affect the development and deployment of these markets and the types of services offered using the LMDS spectrum. The characteristics of LMDS spectrum and equipment help determine the uses to which it will be put. Careful engineering design of LMDS systems has enabled equipment manufacturers to handle rainfall issues with this band of spectrum. Operators of this spectrum will still have to address the line-of-sight issues (*e.g.*, the signal cannot travel through foliage). Consequently, some parties believe that LMDS will likely not be used as a stand-alone network, but as a "roof-top" means to extend other existing networks. Service providers may, for example, use LMDS to fill out their service areas and/or to complement other wireless and fiber means of reaching customers. Compared to fiber, LMDS' lower cost and shorter deployment time make it an effective means of reaching the last mile. At the end of that last mile are likely to be small and medium-sized businesses in urban and suburban areas, as the propagation characteristics of LMDS favor taller buildings.

---

[65] Cellularvision, USA 10-Q, November 16, 1998.

[66] COMMUNICATIONS DAILY, November, 27, 1998, Volume 19, No. 228.

[67] "LMDS Auction Closes," DA 98-572 (Mar. 26, 1998).

[68] "Local Multipoint Distribution Service Auction Closes," DA 99-927 (May 14, 1999).

[69] While the Commission has defined a network as having broadband capability if it "has the capability of supporting, in both the provider-to-consumer (downstream) and the consumer-to-provider (upstream) directions, a speed in excess of 200 Kbps," for purposes of this Notice we use the terms broadband and high speed internet access synonymously. *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans In a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Report on Advanced Telecommunications Capability,* CC Docket No. 98-16 (1999) (Advanced Telecommunications Report), at 9 (para. 20).

34. While multiple dwelling units may be served by LMDS in three to five years, there is a question whether the cost of the customer premises equipment (CPE) will delay a business case for single-family homes in the near future. Estimates for the cost of the CPE range from $5,000 to $7,000.[70] The radio frequency hazard potential of a microwave service like LMDS may require professional installation, precluding cost-saving consumer installation. The subscribers would also have to generate enough revenue to establish a hub from which their remote would receive a signal. Currently, the costs to establish a hub range from $300,000 to $400,000.[71]

35. Service affordability may be another issue for the residential market. A residential market demand for broadband services at prices profitable to LMDS licensees may not exist if consumers are unwilling to pay substantially higher prices for the advantages of broadband.[72] Early cable broadband services have experienced low penetration rates, which may indicate a reluctance of residential consumers to pay a high subscriber fee for high-speed Internet access. However, these early figures may underestimate the actual residential market for high-speed data and Internet access.

36. While deployment of LMDS systems may occur soon, LMDS licensees are encountering difficulties negotiating roof right-of-way agreements and overcoming inside-wiring issues.[73] It has been argued in the trade press that building owners view their buildings as bottlenecks to exploit for financial gain.[74] Estimates of the time to negotiate roof right-of-way terms range from a few months to two years, and some building owners are requesting roof right-of-way fees ranging from $20,000 to $50,000 per year.[75]

37. Another possible source of delay may be the lack of equipment for the 150 MHz LMDS B block and the upper 300 MHz of the LMDS A block. The A- and B-block allocations are unique to the U.S. The lack of international frequency harmonization and the potential interference between the A and B blocks have been blamed for increased equipment development time and costs. Once production commences, the shorter production runs on specialized equipment may frustrate the attainment of scale economies.

38. Of course, several technologies are capable of delivering broadband services. Most residential and small business consumers access the Internet via the ILEC and relatively slow

---

[70] Trade and industry sources.

[71] *See, e.g., LMDS: Stardom or Stagnation*, BROADBAND NETWORKING NEWS, February 16, 1999; *LMDS: Is It A Little Too Much, A Little Too Late?*, Network Computing, February 8, 1999; Redefining Wireless, Wireless Review, March 31, 1999; *LMDS Economics and Opportunities*, Private Cable and Wireless Cable, February 1999.

[72] SPS Strategic Planning Services, *Jupiter Analyst Report*, February 1999, at 5.

[73] *See, e.g., Access Isn't Easy*, Wireless Review, March 31, 1999; Paine Webber, Equity Research, *Without A Net*, March 1999 at 11. *In the Matter of Promotion of Competitive Networks in Local telecommunications Markets*, 64 FR 41887 (08/02/99), pages 28-64.

[74] *Id.* A bottleneck exists where a single entity controls access to a particular input.

[75] *Id.*

modems (*i.e.*, 28-56 Kbps).[76] The residential market is beginning to see high-speed services via coaxial cable, ILEC's xDSL, and satellites.[77] Consumers may purchase xDSL service from an ILEC in their area or from a CLEC that has chosen to serve the residential market.[78] Asymmetric digital subscriber line service (ADSL) is well suited to residential use and can provide end-users 1.54 Mbps downstream.[79]. Cable, which reaches primarily residential markets, may provide high speed Internet service. Under certain conditions, a cable modem can offer the residential and small business customers much faster service: downstream speeds between 1.5 and 3 Mbps with a maximum upstream speed of 2 Mbps. Internet services offered by geostationary satellites, *e.g.*, Hughes DirecPC, promise downstream speeds up to 400 Kbps.[80] Potential wireless sources of broadband services include 24 GHz; 39 GHz; and 2 GHz MDS and 2.5 GHz MMDS and ITFS, where recent approval of two-way communication services with digital transmission capabilities would permit operators to provide broadband services at downstream transmission speeds of 1 Mbps.[81]

39. LMDS will most likely compete against the ILECs and against wireless providers operating at 24 GHz and 39 GHz for new high-speed data and Internet customers.[82] Cable networks' residential reach does not readily extend to the businesses the wireless licensees are targeting. Using similar equipment, wireless carriers operating at 24 GHz, 39 GHz, and LMDS plan to provide the same services to the same target populations. The rules for LMDS, 24 GHz, and 39 GHz allow point-to-point and point-to-multipoint services, and these licensees appear to be targeting small and medium-sized businesses. These frequencies, however, vary somewhat in their propagation characteristics, distance limitations, and spectrum allocations. The rule changes which provide flexibility to MMDS and ITFS licensees to employ digital technology in delivering two-way communication services should enable these operators to compete as well. While MMDS licensees have limited bandwidth capabilities, they do not have the rain-fade, propagation and high-equipment cost problems that LMDS licensees experience. Thus, MMDS could be positioned as a service provider for work-at-home or single-office/home-office markets.

---

[76] *AT&T TCI Order* at (para. 67).

[77] *AT&T TCI Order* at (para. 74). *Advanced Telecommunications Report* at 29-32, Salomon Smith Barney, *Telecommunications Services*, at 17-18.

[78] Salomon Smith Barney, *Telecommunications Services*, at 24.

[79] *Advanced Telecommunications Report*, Charts 2 and 3. Salomon Smith Barney assert that xDSL's capital requirements are relatively low ($10-$15 million for a large city and $5 million for a small city). Salomon Smith Barney, *Telecommunications Service* at 15-16.

[80] *Advanced Telecommunications Report*, Appendix A. *See also Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd 19112 (1998), *Order on Reconsideration*, 14 FCC Rcd 12764 (1999).

[81] *Advanced Services Report* at 31(para. 57) and Charts 2 and 3, *Fifth Annual Report* at 55 (para. 85).

[82] *See, e.g., LMDS Furnishes high-speed wireless access for much less than landline. Trouble is, services are still scarce*, DATA COMMUNICATIONS , March 7, 1999; *Facing An Uncertain Future, LMDS Firms Eye New Course*, MULTICHANNEL NEWS, December 14, 1998.

V. Sunset of the LMDS Eligibility Restriction

40. In furtherance of our review of the eligibility restriction for the Local Multipoint Distribution Service (LMDS),[83] we are here seeking comment broadly on the question whether the restriction should be allowed to sunset on June 30, 2000, or should be extended. We note that the rule provides that the restriction will terminate unless we "extend its applicability based on a determination that incumbent LECs or incumbent cable companies continue to have substantial market power in the provision of local telephony or cable television services."[84] Consistent with our findings above that the incumbent LECs and cable television providers continue to hold dominant positions in the local telephony and MVPD services markets, this standard would suggest that we extend the applicability of the eligibility restriction.[85] We have significant questions, however, about whether this standard remains the appropriate one for evaluating whether we should extend the restriction or whether a different standard is more appropriate.

41. We therefore seek comment generally on the standard that we should apply in making this decision, as well as on a couple of specific alternative standards. For example, our analysis in the *LMDS Report and Order* suggests that the true harm to competition may lie not in the incumbent local exchange carriers' or cable companies' power in their respective markets, but in the incumbents' incentive and ability to foreclose LMDS as a source of competition in their own or related markets.[86] Thus, we could amend the rule to extend the sunset of the eligibility rule upon a finding that the incumbent local exchange carriers and cable companies possess the incentive and ability to purchase the LMDS block to prevent entry of a competitor. Alternatively, we seek comment on whether we should use the test adopted in the *39 GHz Report and Order*. There, we "inquired whether open eligibility poses a significant likelihood of substantial competitive harm in specific markets, and, if so, whether eligibility restrictions are an effective way to address that harm."[87] We seek comment on whether we should require that this test be met before extending the LMDS eligibility restriction. Finally, we seek comment on the sufficiency of case-by-case review of license transfers and assignments to safeguard against anti-competitive acquisition of LMDS licenses if the eligibility rule is allowed to sunset.

42. Our analysis will be informed by the prospective uses of LMDS spectrum. In the *LMDS Report and Order*, the Commission found that LMDS was a likely vehicle for the

---

[83] When we originally adopted the LMDS eligibility restriction in 1997, with the June 30, 2000, termination date, we specifically noted that we would be undertaking a review of the restriction in 2000. *Second Report and Order*, 12 FCC Rcd at 12633 (para. 198). We decided last year to expedite this review to allow a decision whether to initiate a rulemaking proceeding to consider possible extension of the termination date. *Third Order on Reconsideration* at para. 113.

[84] 47 C.F.R. § 101.1003(a)(1).

[85] *See, supra,* at paras. 13, 25.

[86] *Second Report* at 12621-23 (paras. 170-75).

[87] *39 GHz Report and Order*, 12 FCC Rcd 18600 at 18619 (para.32); *see also Amendments to Parts 1, 2, and 101 of the Commission's Rules To License fixed Services at 24 GHz*, Notice of Proposed Rulemaking, FCC 99-333, ¶20 (rel. Nov. 10, 1999).

provision of local telephony, MVPD service, or both.[88] We seek comment on our analysis above as to the likely course of LMDS market development, particularly LMDS licensees' and equipment manufacturers' current expectations for LMDS and the markets most likely to be targeted by the licensees. More specifically, we seek comment on the characteristics, technical and otherwise, of the services most likely to be provided over LMDS. We seek comment on whether LMDS will be used to provide typical landline service in some geographic areas and to what consumer groups. We seek comment on whether LMDS licensees expect to use LMDS to deliver MVPD services to single-dwelling residential customers and/or multi-dwelling residential customers in any geographic areas. Further, we seek comment on the characteristics of the consumers to which these services will be directed. Finally, we seek comment on what broadband applications, if any, are likely to be provided by LMDS licensees, and the characteristics of the consumers that will be targeted.

43. After reevaluating current information on the likely uses of LMDS spectrum, we also plan to evaluate whether we should extend the eligibility restriction to avert the possibility of incumbent LECs and cable companies acquiring LMDS to forestall new facilities-based competition for broadband services.[89] The net benefits of extending the eligibility restriction will depend on a number of factors, including, whether the LMDS A block can serve as a facilities-based medium for broadband services and whether this spectrum is unique in both its size and extent to which it is unencumbered. We seek comment on whether the net benefits of extending the eligibility restriction may be greater than the net benefits of permitting the incumbents to acquire the LMDS A block.

44. We seek comment on the extent and robustness of residential consumer demand for broadband services. We invite comment on the extent the cost and line-of-sight limitations of LMDS might hamper the ability of LMDS to provide effective competition to either the ILECs' or the cable operators' broadband means of access into the home or very small businesses. We also seek comment on whether technological advances and increasing deployment will improve equipment range and lower equipment costs. Comments are also sought on the extent to which affordability enhancing innovations like equipment leasing may emerge as an alternative to outright equipment purchase, particularly for CPE.

45. We seek comment on whether the capability of LMDS to provide high-speed data and Internet telecommunications would give incumbents a strategic incentive to acquire LMDS spectrum to forestall the use of LMDS as a means of access for another facilities-based provider of broadband services. If LMDS is suited to provide a third means of broadband access into the home, or into small- and medium-sized businesses, then the incumbent LECs and cable operators could attempt to forestall the entry of a potential competitor by buying out the current LMDS licensees. If there are numerous sources of broadband access for potential providers, then the risk of permitting the incumbents access to the LMDS A block may not be significant. We seek

[88] *Second Report* at 12621-23 (paras. 170-75).

[89] The costs of continuing the restriction would seem to be low because the incumbents can acquire licenses in other frequencies, and the Commission previously concluded that efficiencies would not be sacrificed by the temporary eligibility restriction. *Second Report*, 12 FCC Rcd at 12624 (para. 177).

comment on whether we should retain the LMDS eligibility restriction for at least some period in order to prevent the incumbent LECs and cable operators from forestalling the entry of a potential LMDS entrant into the high-speed Internet market by buying out the current LMDS licensees. With respect to cable, if the cable industry primarily serves residential areas and likely LMDS service will be to small- and medium-sized businesses, we seek comment on whether we should restrict incumbent cable companies' use of the LMDS spectrum to serve business needs for high-speed data and Internet access.

46. We invite comment about the extent to which LMDS, MMDS, 24 GHz, 39 GHz, and other media that might offer consumers broadband access are substitutable. We seek comment on the degree to which LMDS, MMDS, 24 GHz, 39 GHz, and other frequencies could be used to offer consumers similar services at similar prices; whether the size of the LMDS allocation and its lack of encumbrances provide advantages to the license holder over alternative frequencies; and whether the limitations and the cost of LMDS will hamper the ability of LMDS to provide effective competition for services provided by either the incumbent LECs or cable operators. We seek comment on the limitations (capacity, rain fade, and line of sight) of these other wireless services relative to LMDS. We seek comment on the extent to which the time-to-market leads of the 24 MHz and 39 MHz licensees yield competitive advantages in high-speed data and Internet access that could handicap LMDS licensees. Given the similarities between LMDS and 24 GHz and 39 GHz spectrum, we seek comment on the implications of the lack of eligibility restrictions at the latter two frequencies.

47. We seek comment on the question whether the broadband offerings by ILECs and incumbent cable operators justifies extension of the restriction to either ILECs or incumbent cable companies or both. We seek comment on the likelihood that LMDS, if used for broadband, will provide effective competition against incumbent LECs' and cable operators' broadband offerings. Specifically, we invite comments on the incumbent LECs' and cable operators' most likely footprints for broadband services. Cable operators' current coverage areas do not lend themselves to providing broadband access to businesses. We invite comment on the present reach of cable networks and the ease with which these networks could be extended to reach business subscribers. In addition, we seek comment on whether the ILECs are likely to provide xDSL services to a large segment of residential or business customers. We seek comment on whether the equipment cost and deployment cost of LMDS relative to ILECs' T-1 leased lines or xDSL will disadvantage LMDS in the market. To the extent LMDS and a T-1 line are substitutes, the falling prices for T-1 leased lines may diminish the profitability of LMDS service.[90]

48. We seek comment on the significance of uncertainty in the market for the eligibility restriction. LMDS deployment clearly is nascent. There are uncertainties regarding how LMDS equipment will continue to evolve, how fast LMDS equipment costs will fall, and how much difficulty the licensees will encounter negotiating roof right-of-way agreements, interconnection agreements, and other necessary negotiations to provide services. The first LMDS equipment

[90] Salomon Smith Barney reports that SBC offers T-1 lines for $325-$725 per month. Salomon Smith Barney, *Telecommunications Service*, April 9, 1999, at 17; Paine Webber, at 10.

application was not certified until May 1999, and the manufacturer had only applied for certification in December 1998. With the first LMDS products only now becoming available in the U.S., it is too early to predict how the LMDS market will develop in the U.S. These uncertainties may have led firms to hold off investments until there is less uncertainty in the market.[91] It has been argued in the economic literature that, "firms that refuse to invest even when the currently available rates of return are far in excess of the cost of capital may be optimally waiting to be surer that this state of affairs is not transitory."[92] Thus, it can be optimal for the Commission to delay the sunset of the eligibility restriction as well as for firms to delay their investment decisions when there is uncertainty in the market and important information that will be revealed over time. We seek comment on these concerns and on whether the Commission should extend the eligibility restriction to allow the market more time to reveal how LMDS and competing media will be marketed and deployed.

49. Finally, we note that uncertainty in the market impacts bond and stock market activity. The uncertainty surrounding LMDS may spill over into the capital markets and impede the efforts of LMDS licensees to raise debt and equity capital. We seek comment on the effect of extending, or not extending, the eligibility restriction on LMDS licensees' access to capital. While extending the eligibility restriction might encourage investment, lifting the restriction could have a similar effect: that is, large investors currently prohibited from doing so might acquire significant stakes in LMDS licensees, stimulating investment therein. We seek comment on both scenarios. We also seek comment on the concerns of small entities on the various issues discussed above.

VI. Procedural Matters

A. Regulatory Flexibility Analysis

50. The Initial Regulatory Flexibility Analysis (IRFA) for this proceeding is set out in Appendix B.

B. Ex Parte Presentations

51. This NPRM is a permit-but-disclose notice and comment rulemaking proceeding. Ex parte presentations are permitted, except during the "Sunshine Agenda" period, provided they are disclosed under the Commission's Rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

C. Pleading Dates

52. Pursuant to sections 1.415 and 1.419 of the Commission's Rules,[93] interested parties may file comments on or before January 21, 2000 and reply comments on or before February 11, 2000. Comments and reply comments should be filed in CC Docket No. 92-297. All relevant

[91] *See, e.g.*, Paine Webber at 10.

[92] Avinash Dixit, *Investment and Hysteresis,* JOURNAL OF ECONOMIC PERSPECTIVES, Volume 6, No. 1, Winter 1992, 109.

[93] 47 C.F.R. §§ 1.415, 1.419.

and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally, interested parties must file an original and four copies of all comments, reply comments, and supporting comments. If interested parties want each Commissioner to receive a personal copy of their comments, they must file an original plus nine copies. Interested parties should send comments and reply comments to the Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554, with a copy to John Spencer, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554. Parties are also encouraged to file a copy of all pleadings on a 3.5-inch diskette in MS Word 1997 format.

53. Comments may also be filed using the Commission's Electronic Comment Filing System (ECFS).[94] Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and a reference to CC Docket No. 92-297. Parties may also submit an electronic comment by Internet e-mail. To obtain filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the words "get form <your e-mail address>" in the body of the message.

54. Comments and reply comments will be available for public inspection during regular business hours at the FCC Reference Center, 445 12th Street, S.W., Washington, D.C. 20554. Copies of comments and reply comments are available through the Commission's duplicating contractor: International Transcription Services, Inc., 2100 M Street, N.W., Washington, D.C. 20037.

D. Further Information

55. For further information concerning this rulemaking proceeding, contact John Spencer or Stacy Jordan at (202) 418-1310, Policy Division, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, D.C. 20554.

VII. Ordering Clauses

56. Accordingly, IT IS ORDERED that these actions ARE TAKEN pursuant to sections 1, 2, 4(i), 7, 303(r), 314, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 157, 303(r), 314, 332.

57. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulatory changes described in this Notice, and that comment is sought on these proposals.

58. IT IS FURTHER ORDERED that the Initial Regulatory Flexibility Analysis, as required by Section 604 of the Regulatory Flexibility Act and as set forth in Appendix B, is adopted.

[94] *See* Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

59. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas

Magalie Roman Salas
Secretary

Appendix A

State-by-State Subscription for Cable and DTH Satellite Services

State	As of July 1, 1997		As of July 1, 1999	
	CS / (CS + DS)	DS / TV HHs	CS / (CS + DS)	DS / TV HHs
Alabama	81.5%	13.7%	76.3%	18.3%
Alaska	89.0%	8.7%	86.0%	10.1%
Arizona	87.2%	7.9%	80.2%	14.1%
Arkansas	80.0%	14.5%	72.9%	21.9%
California	92.4%	5.1%	87.6%	8.7%
Colorado	88.7%	8.5%	79.4%	15.1%
Connecticut	96.9%	2.7%	95.1%	4.4%
Delaware	93.1%	6.7%	89.6%	10.8%
Florida	91.3%	7.2%	87.2%	11.7%
Georgia	83.3%	15.4%	80.4%	15.5%
Hawaii	99.5%	0.5%	99.3%	0.7%
Idaho	78.7%	13.8%	70.1%	21.2%
Illinois	91.3%	5.2%	86.0%	9.9%
Indiana	84.4%	10.8%	76.4%	18.1%
Iowa	84.2%	10.7%	75.9%	17.7%
Kansas	85.9%	10.1%	79.1%	16.1%
Kentucky	83.0%	13.1%	75.0%	21.0%
Louisiana	88.6%	8.3%	83.4%	13.0%
Maine	80.7%	15.7%	76.6%	20.3%
Maryland	93.4%	4.4%	89.2%	8.6%
Massachusetts	97.0%	2.3%	94.6%	4.2%
Michigan	89.0%	7.9%	82.0%	13.8%
Minnesota	86.5%	7.9%	79.6%	14.0%
Mississippi	77.1%	15.8%	69.6%	22.9%
Missouri	82.6%	11.2%	72.6%	18.6%
Montana	69.0%	23.6%	58.8%	36.2%
Nebraska	86.3%	10.5%	80.4%	16.0%
Nevada	89.6%	8.3%	83.5%	12.3%
New Hampshire	90.7%	8.7%	87.8%	11.4%
New Jersey	97.0%	2.3%	94.0%	5.2%
New Mexico	83.9%	10.6%	75.7%	17.9%
New York	93.5%	4.6%	89.8%	8.1%
North Carolina	81.8%	13.8%	74.0%	21.4%
North Dakota	83.4%	12.4%	72.3%	23.4%
Ohio	90.9%	6.1%	86.4%	10.5%
Oklahoma	85.0%	9.9%	76.7%	16.9%
Oregon	85.1%	10.2%	78.4%	16.1%
Pennsylvania	94.0%	4.8%	90.8%	7.9%
Rhode island	96.3%	3.1%	92.1%	6.4%
South Carolina	82.2%	12.7%	75.8%	19.1%

State	As of July 1, 1997		As of July 1, 1999	
	CS / (CS + DS)	DS / TV HHs	CS / (CS + DS)	DS / TV HHs
South Dakota	80.5%	13.9%	73.4%	19.9%
Tennessee	83.4%	12.2%	77.0%	17.7%
Texas	85.4%	8.5%	76.4%	15.8%
Utah	81.7%	11.0%	70.1%	18.3%
Vermont	76.1%	22.1%	67.9%	33.6%
Virginia	86.9%	9.7%	83.7%	14.9%
Washington	87.4%	8.8%	81.8%	13.1%
Washington D.C.	95.7%	2.1%	90.6%	4.8%
West Virginia	83.7%	13.8%	78.5%	19.6%
Wisconsin	86.5%	8.7%	78.3%	16.1%
Wyoming	78.6%	18.5%	71.6%	26.1%

Notes: CS: Basic Cable Subscribers; DS: DTH subscribers for DirecTV/USSC, EchoStar, Primestar, and C-Band; TV HHs: TV Households. The ratio CS/(CS +DS) underestimates cable's share of MVPD subscribers because we do not have statewide data on subscribers to OVS, SMATV and MMDS. DTH penetration is measured by the ratio DS/(TV HHs). The figures are calculated from statewide data reported in *Sky Report*. For both 1997 and 1999, Montana has the highest penetration of DTH service and the lowest proportion of subscribers on a cable system. Similarly, for both 1997 and 1999, Hawaii has the lowest penetration of DTH service and the highest proportion of subscribers on a cable system. Source: *Sky Report*, July 1997, and July 1999.

Appendix B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act (RFA),[1] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible economic impact on small entities by the policies and rules suggested in this Sixth Notice of Proposed Rule Making (Sixth NPRM). Written public comments are requested on the IRFA. Comments should be identified as responses to the IRFA, and must be filed by the deadlines for comments on the Sixth NPRM provided above on the first page, in the heading. The Commission will send a copy of the Sixth NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

(a) Need for and Objectives of the Proposed Rule

2. In this Sixth NPRM, the Commission seeks comment on whether to allow the eligibility restriction for the Local Multipoint Distribution Service (LMDS) set out in 47 C.F.R. § 101.1003(a) to sunset as scheduled, or to extend the restriction. As discussed in detail supra, various policy reasons might dictate action for or against the sunset.[2]

(b) Legal Basis

3. The notice is authorized by sections 1, 2, 4(i), 7, 303(r), 314 and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(I), 157, 303(r), 314, 332.

(c) Description and Estimate of the Number of Small Entities to Which the Actions Taken May Apply

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the action taken.[3] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[4] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[5] A small

---

[1] *See* 5 U.S.C. § 603. The RFA, 5 U.S.C. § 601 *et seq.*, has been amended by the Contract with America Advancement Act, Pub. L. No. 104-121, 110 Stat. 847 (1996)(CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

[2] *See* paras. 40-49, *supra*.

[3] 5 U.S.C. § 603(b)(3).

[4] *Id.* § 601(6).

[5] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

business concern is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[6] Below, we further describe and estimate the number of small business concerns that may be affected by the actions taken in this Sixth NPRM.

5. As noted, under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the SBA.[7] The SBA has defined a small business for Standard Industrial Classification (SIC) categories 4812 (Radiotelephone Communications) and 4813 (Telephone Communications, Except Radiotelephone) to be small entities when they have no more than 1,500 employees.[8] We first discuss the number of small telecommunications entities falling within these SIC categories, then attempt to refine further those estimates to correspond with the categories of telecommunications companies that are commonly used under our rules, and that may be affected by this Sixth NPRM.

6. *Total Number of Telecommunications Entities Affected.* The Census Bureau reports that, at the end of 1992, there were 3,497 firms engaged in providing telephone services, as defined therein, for at least one year.[9] This number contains a variety of different categories of entities, including local exchange carriers, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, PCS providers, covered SMR providers, and resellers. It seems certain that some of those 3,497 telephone service firms may not qualify as small entities or small incumbent LECs because they are not "independently owned and operated."[10] For example, a PCS provider that is affiliated with an interexchange carrier having more than 1,500 employees would not meet the definition of a small business. It seems reasonable to conclude, therefore, that fewer than 3,497 telephone service firms are small entity telephone service firms or small incumbent LECs that may be affected by the actions taken in this Second Report and Order.

7. The most reliable source of current information regarding the total numbers of common carrier and related providers nationwide, including the numbers of commercial wireless entities, appears to be data the Commission publishes annually in its *Carrier Locator* report, derived from filings made in connection with the Telecommunications Relay Service (TRS).[11] According to data in the most recent report, there are 3,604 interstate carriers.[12] These include,

---

[6] Small Business Act, 15 U.S.C. § 632.

[7] 15 U.S.C. § 632. *See, e.g., Brown Transport Truckload, Inc. v. Southern Wipers, Inc.*, 176 B.R. 82 (N.D. Ga. 1994).

[8] 13 C.F.R. § 121.201.

[9] *1992 Census of Transportation, Communications, and Utilities: Establishment and Firm Size*, Bureau of the Census, U.S. Dept. of Commerce, at Firm Size 1-123 (1995) (1992 Census).

[10] 15 U.S.C. § 632(a)(1).

[11] *Carrier Locator: Interstate Service Providers*, Fig. 1 (Jan. 1999) (*Carrier Locator*). *See also* 47 C.F.R. §§ 64.601-.608.

[12] *Carrier Locator* at Fig. 1.

inter alia, local exchange carriers, wireline carriers and service providers, interexchange carriers, competitive access providers, operator service providers, pay telephone operators, providers of telephone toll service, providers of telephone exchange service, and resellers.

8. We have included small incumbent local exchange carriers (LECs) in this RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[13] The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[14] We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on FCC analyses and determinations in other, non-RFA contexts.

9. *Wireline Carriers and Service Providers (SIC 4813).* The Census Bureau reports that there were 2,321 telephone communications companies other than radiotelephone companies in operation for at least one year at the end of 1992.[15] All but 26 of the 2,321 non-radiotelephone companies listed by the Census Bureau were reported to have fewer than 1,000 employees. Thus, even if all 26 of those companies had more than 1,500 employees, there would still be 2,295 non-radiotelephone companies that might qualify as small entities or small incumbent LECs. Although it seems certain that some of these carriers are not independently owned and operated, we are unable at this time to estimate with greater precision the number of wireline carriers and service providers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 2,295 small entity telephone communications companies other than radiotelephone companies that may be affected by the actions taken in this Sixth NPRM.

10. *Local Exchange Carriers.* Neither the Commission nor SBA has developed a definition of small LECs. The closest applicable definition for these carrier-types under SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.[16] The most reliable source of information regarding the number of these carriers nationwide of which we are aware appears to be the data that we collect annually in connection with the TRS.[17] According to our most recent data, there are 1,410 LECs.[18] Although it seems

---

[13] 5 U.S.C. § 601(3).

[14] Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b). Since 1996, out of an abundance of caution, the Commission has included small incumbent LECs in its regulatory flexibility analyses. *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket, 96-98, First Report and Order, 11 FCC Rcd 15499, 16144-45 (1996).

[15] 1992 Census, *supra*, at Firm Size 1-123.

[16] 13 C.F.R. § 121.210, SIC Code 4813.

[17] *See* 47 C.F.R. § 64.601 *et seq.*; *Carrier Locator* at Fig. 1.

certain that some of these carriers are not independently owned and operated, or have more than 1,500 employees, we are unable at this time to estimate with greater precision the number of these carriers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 1,410 small entity LECs or small incumbent LECs that may be affected by the actions taken in this Sixth NPRM.

11. *A-Block LMDS Providers.* The total number of A-block LMDS licenses is limited to 493, one for each Basic Trading Area.[19] The Commission has held auctions for all 493 licenses, in which it defined "very small business" (average gross revenues for the three preceding years of not more than $15 million), "small business" (more than $15 million but not more than $40 million), and "entrepreneur" (more than $40 but not more than $75 million) bidders.[20] There have been 99 winning bidders that qualified in these categories in these auctions, all of which may be affected by the actions taken in this Sixth NPRM.

12. *Cable Services or Systems.* The SBA has developed a definition of small entities for cable and other pay television services, which includes all such companies generating $11 million or less in revenue annually.[21] This definition includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems and subscription television services. According to the Census Bureau data from 1992, there were 1,788 total cable and other pay television services and 1,423 had less than $11 million in revenue.[22]

13. The Commission has developed its own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.[23] Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable system operators at the end of 1995.[24] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators.

---

[18] *Carrier Locator* at Fig. 1. The total for resellers includes both toll resellers and local resellers. The TRS category for CAPs also includes competitive local exchange carriers (CLECs) (total of 129 for both).

[19] 47 C.F.R. §§ 101.1005, 101.1007.

[20] 47 C.F.R. §§101.1107(a)-(c), 101.1112.

[21] 13 C.F.R. § 121.201, SIC 4841.

[22] *1992 Economic Census Industry and Enterprise Receipts Size Report*, Table 2D, SIC code 4841 (U.S. Bureau of the Census data under contract to the Office of Advocacy of the U.S. Small Business Administration).

[23] 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of $100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation, Sixth Report and Order and Eleventh Order on Reconsideration*, 10 FCC Rcd 7393 (1995), 60 FR 10,534 (Feb. 27, 1995).

[24] Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for December 30, 1995).

14. The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[25] The Commission has determined that there are 66,000,000 subscribers in the United States. Therefore, we found that an operator serving fewer than 660,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed $250 million in the aggregate.[26] Based on available data, we find that the number of cable operators serving 660,000 subscribers or less totals 1,450.[27] We do not request nor do we collect information concerning whether cable system operators are affiliated with entities whose gross annual revenues exceed $250,000,000,[28] and thus are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act. It should be further noted that recent industry estimates project that there will be a total of 66,000,000 subscribers.

(d) Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

15. In this Sixth NPRM we seek comment on whether to allow the existing LMDS eligibility restriction to sunset. These actions impose no reporting, recordkeeping or other compliance requirements.

(e) Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

16. This Sixth NPRM is a broad inquiry into whether there continues to be a need for an LMDS ownership restriction. It seeks comment on the present and likely future nature of the marketplace for various services that may be offered using LMDS spectrum, the costs and benefits of a restriction, and appropriate criteria for evaluating whether to extend the restriction.[29] It also seeks the views of small businesses on the various issues raised.[30]

[25] 47 U.S.C. § 543(m)(2).

[26] 47 U.S.C. § 76.1403(b).

[27] Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

[28] We do receive such information on a case-by-case basis only if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.1403(b) of the Commission's rules. *See* 47 C.F.R. § 76.1403(d).

[29] *See* Sixth NPRM at paras. 40-49.

[30] *Id.* at para. 49.

(f) Federal Rules That May Overlap, Duplicate, or Conflict with the Proposed Rules

17. There are no federal rules that overlap, duplicate or conflict with 47 C.F.R. § 101.1003(a).

(g) Report to Congress

18. The Commission will send a copy of this Sixth NPRM, including this IRFA, in a report to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.[31] In addition, the Commission will send a copy of this Sixth NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of this Sixth NPRM and IRFA (or summaries thereof) will also be published in the Federal Register.

[31] *See* 5 U.S.C. § 801(a)(1)(A).

DISSENTING STATEMENT OF
COMMISSIONER HAROLD FURCHTGOTT-ROTH

Re Rulemaking to Amend Parts 1,2 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, Sixth Notice of Proposed Rule Making, CC Docket No. 92-297

Today's decision continues an unfortunate chapter in the Commission's purported move towards deregulation and reliance on market forces. I have previously voiced my disappointment with the Commission's decision to impose eligibility requirements on LMDS licensees.[1] As those onerous restrictions are scheduled to sunset, the Commission has issued this NPRM apparently seeking out a rationale for an extension of these prohibitions. I believe that economic theory and the LMDS experience to date illustrate the negative impact of these policies. In fact, today's NPRM only adds uncertainty to this fragile market. Therefore I would not have issued today's NPRM, but instead would have allowed the restrictions to end on July 1, 2000.

The Commission imposed eligibility restrictions on LMDS with an assurance that these extreme measures would be temporary. The majority held that "[b]y temporarily restricting incumbents' eligibility to acquire in-region LMDS licenses, this policy maximizes the likelihood of increasing competition in both the LEC and MVPD markets."[2] To date, there has been no LMDS competition in the LEC and MVDS markets. In fact, there has barely been any LMDS service at all.

As I said in 1998, "[e]ligibility restrictions on an innovative new service are a draconian measure; such bans on competition should be used only to prevent a substantial competitive harm to a specific market. Here, the eligibility restrictions are imposed not to prevent a specific harm, but in an attempt to enhance the mere possibility of competition."[3] Nothing in our LMDS experience or the competitive landscape alters my view. Indeed I fear that the possible extension of these eligibility requirements will create greater market uncertainty and further delay the day that LMDS is deployed as a meaningful competitor in any market.

---

[1] See *Separate Statement of Commissioner Harold Furchtgott-Roth* in Rulemaking to Amend Parts 1,2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, Petitions for Further Reconsideration of the Denial of Applications for Waiver of the Commission's Common Carrier Point-to-Point Microwave Radio Service Rules, CC Docket No. 92-297, Third Order on Reconsideration (February 3, 1998). Similar concerns were expressed by Commissioner Powell in that proceeding and by Commissioner Chong in the Second Report and Order.

[2] See Rulemaking to Amend Parts 1,2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, Second Report and Order, 12 FCC Rcd 12545, ¶ 162 (1997); see also id. at ¶ 160 (restrictions would be "short-term").

[3] See *Separate Statement of Commissioner Harold Furchtgott-Roth* in LMDS Third Order on Reconsideration.

The Commission initially justified these eligibility restrictions based on its apparent perception that LMDS represented a unique competitive alternative that cable and telephony incumbents would attempt to thwart by purchasing -- and subsequently under-utilizing -- the spectrum. The Second Report held that the "temptation for preemptive acquisition is particularly compelling here because of the unusually large size of the LMDS spectrum allocation. . . relatively unused. . . . and [with] development of equipment and technology [that] is already quite advanced."[4]

While the Second Report and Order touted the service based on its "high" likelihood to provide competition in telephony and cable, our experience has been significantly less positive.[5] Two and a half years later, there is little appreciable deployment of LMDS and the NPRM cites a parade of factors that continue to hinder LMDS development. These factors include service affordability, lack of building access, lack of equipment, and line-of-sight problems. My point is not that LMDS is a good or bad technology, or that it will or will not develop into a viable market alternative. Rather, my point is that there is nothing unique about LMDS that warrants excluding some providers from that market.

The LMDS auctions themselves also seem to support the idea that this spectrum is not a distinctly coveted resource. As the decision notes, there have been two LMDS auctions. In total, the 400 A Block and 525 B Block licenses sold for approximately $323 million dollars. The Notice trumpets this number: "[t]he willingness of LMDS licensees to bid large sums demonstrates a substantial and probable market for LMDS."[6] Yet even these sums– when compared with the tens of billions of dollars bid for companies with only a potential to reach only a portion of America by wire or fiber -- hardly indicate that this spectrum is the "third pipe" into Americans homes that is uniquely well-positioned to compete with incumbent cable and telephony providers.

In this evolving market, the Commission has singled out LMDS among fixed wireless bands for these burdensome restrictions.[7] In reality, there are numerous other competitive wireless alternatives to cable and wireline telephony – yet we have wisely chosen not to extend the LMDS eligibility restrictions to those services.[8] The availability of these market alternatives further undermines the notion that ILECs and cable companies would have a rational incentive to purchase all the relevant spectrum in each of the fixed wireless bands in order "to protect their market power and preserve a stream of future profits."[9] The market has simply created too many alternatives for there to be

---

4 See Second Report and Order at ¶ 175.

5 See Second Report and Order at ¶ 170.

6 Order at ¶ 31. These costs are also substantial enough, however, to provide a significant disincentive for cable and telephony companies to spend resources trying to obtain these licenses, bur not use them efficiently.

7 All of these market analyses seem misguided too in light of the NPRM's conclusion that "LMDS will likely not be used as a stand-alone network, but as a 'roof-top' means to extend other existing networks. Service providers are likely to use LMDS to fill out their service areas and/or to complement other wireless and fiber means of reaching customers." Order at ¶ 33.

8 As noted in the NPRM, these services include the 24 GHz and 39 GHz bands as well as 2 GHz MDS and 2.5 GHz MMDS and ITFS.

9 Second Report and Order at ¶ 171.

any economically rational "warehousing" of spectrum. This is especially true at a time when incumbent cable and wireline telephony providers are defending their turf from competitors of all shapes and sizes.

In putting aside the telephony and cable market theories, the Notice now posits that LMDS could be a viable broadband competitor. Yet here too there are other alternatives, and the only rationale for keeping some players out is speculation about some future potential harm.[10] Moreover, I had hoped we were past the time when the Commission would seek out new rationales for defending old anti-competitive restrictions. We should be looking to knock down market barriers, not attempting to shore them up.

In contrast to the speculative harms cited by the Notice, there are some significant potential benefits from eliminating these restrictions. First, LECs and cable companies may provide an infusion of much-needed capital to jump start these services.[11] Second, LMDS may be a logical service to use in "filling in" underserved areas for existing providers.[12] Third, LECs and cable operators may be in a position to ease the building access issues based on existing access arrangements. Fourth, the prohibited entities may provide useful expertise in technology, marketing, and product development. While this list is by no means exhaustive, it does demonstrate the potential market benefits from abandoning this competition ban.

Even if there were no identifiable, specific benefits to allowing one class of entities to compete in a market, the mere denial by a government agency of even an opportunity to compete in a market offends basic concepts of justice and equity. If a government agency can deny opportunities to compete in a market to one class of entities, it can just as easily deny opportunities for another class of entities in a different market. It is not for the government to burden any class of would-be competitors with an obligation to demonstrate that they merit an opportunity to compete; it is the obligation of government to demonstrate that anyone should by rule of law be excluded.

No one should suffer the illusion that any market from which anyone has been excluded without the soundest of reasons can be described as competitive. A competitive market has entry uncontrolled by the government. In my view, the Commission and the public would be best served by allowing these potential competitors full access to the marketplace.

---

[10] The Commission has elsewhere determined that the broadband marketplace is competitive, thus appearing to undermine any eventual assertion to the contrary here. *See* e.g. Cable Services Bureau, "Broadband Today," A Staff Report to FCC Chairman Kennard, at 23-30 (October 1999).

[11] This is consistent with the Commission's prior conclusions regarding LEC and cable entry into other markets. See e.g. *Amendment of the Commission's Rules to Establish New Personal Communications Services*, 8 FCC Rcd 7700, ¶ 126 (1993) (". . . we also find that allowing LECs to participate in PCS may produce significant economies of scope between wireline and PCS networks. We believe that these economies will promote more rapid development of PCS and will yield a broader range of PCS services at lower costs to consumers. In addition, allowing LECs to provide PCS service should encourage them to develop their wireline architectures to better accommodate all PCS services.")

[12] Order at ¶ 33.

I also join in the concern expressed by my colleague, Commissioner Powell, regarding the staff-level review that undergirds key parts of today's Notice. All parties are better served by an open process that allows for a free exchange of ideas about pending Commission matters. I see no reason to keep that Report from the parties and join Commissioner Powell in calling for its release.

Based on these considerations, I respectfully dissent.

DISSENTING STATEMENT OF COMMISSIONER MICHAEL POWELL

Re: Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, *Sixth Notice of Proposed Rulemaking*, FCC 99-379

I oppose reopening this seven-year-old proceeding to reevaluate whether the temporary ownership restriction imposed on incumbent local exchange carriers (LECs) and cable television operators should be extended. This Sixth Notice of Proposed Rule Making (Notice) wastes valuable time and resources, serves no meaningful end and will only cause further uncertainty and delay in the implementation of the local multipoint distribution service (LMDS).

At the outset, I concur with Commissioner Furchtgott-Roth's separate statement. My colleague makes some very compelling and eloquent points. I agree with him that this Notice should not be issued and that these restrictions should be allowed to terminate as scheduled.

The original basis for barring incumbent LECs and cable providers from access to LMDS spectrum was rooted in fears about incumbent predatory motives to protect their existing monopolies in their core services. The fear of the prior Commission was that these providers would buy up and warehouse LMDS spectrum in order to blunt new competition and, consequently, new threats to their dominance.[1] On reconsideration, I questioned this speculative predatory premise then and warned that we might forgo the opportunity for incumbents to employ their formidable competency to attack incumbents in other sectors (cable into telephony, for example).[2] Yet, today, we contemplate extending that premise into nascent broadband Internet access markets, where the speculative assumption that LECs and cable companies will act to take LMDS spectrum off the market is even more untenable.

Under the current rule, the Commission may extend the ownership restriction upon a determination that incumbent LECs or incumbent cable companies "continue to have substantial market power in the provision of local telephony or cable television services."[3] This item concludes that incumbent LECs continue to hold a dominant position in the provision of local

---

[1] *See* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies For Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket 92-297, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking*, 12 FCC Rcd 12545, 12614-26 (1997) (*Second Report and Order*).

[2] *See* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, *Third Order on Reconsideration*, 13 FCC Rcd 4856, 4964 (1998) (*Separate Statement of Commissioner Powell*) (*Third Order on Reconsideration*).

[3] 47 C.F.R. § 101.1003(a)(1).

exchange and local exchange access services and that incumbent cable operators continue to hold dominant positions in the multi-channel video programming distribution (MVPD) services market.[4] But the Notice also says that more recent information indicates that, in the near term, LMDS:

> may be used primarily to provide high-speed data and Internet services to small and medium-sized businesses rather than to provide services, especially MVPD services, to single-family residences. . . . An industry segment aiming to provide service akin to typical landline service (including lifeline telephone service with directory assistance) has yet to emerge though.[5]

Clearly, the Commission is coming to the view that the anticipated uses of LMDS spectrum that originally formed the basis of the restriction has been eroded by market (and technological) developments. The majority, thus, is now shifting gears to both redefine the affected product market and establish "alternative" standards that would justify continuance of the rule.

I am troubled that the majority has elected to re-shape the LMDS Second Report and Order by speculating that "the true harm to competition may lie not in the incumbent local exchange carriers' or cable companies' power in their respective markets, but in the incumbents' incentive and ability to foreclose LMDS as a source of competition in their own or *related markets*."[6] The Notice then says, "we could amend the rule to extend the sunset of the eligibility rule upon a finding that the incumbent local exchange carriers and cable companies possess the *incentive and ability* to purchase the LMDS block to prevent entry of a competitor."[7] This potential standard could be used to extend the rule based on mere speculation of potential anticompetitive motives in seemingly any market, not just those in which incumbents are presently dominant. Further, the majority provides that "we also plan to evaluate whether we should extend the eligibility restriction to avert the *possibility* of incumbent LECs and cable companies acquiring LMDS to forestall new facilities-based competition for *broadband services*."[8]

---

[4] Notice at ¶ 24 and ¶ 30.

[5] Id. at ¶ 32.

[6] Id. at ¶ 41 (emphasis added) (citing *Second Report and Order*, 12 FCC Rcd 12545, 12621-23 ¶¶ 170-175). While the cited paragraphs disclose the Commission's prediction (in 1997 and before the LMDS auction) that LMDS licenses "may" be used to provide service in "a broadband data market," these passages actually establish the premise of the current restriction to curb the incentives of the incumbents to "perpetuate the status quo," foreclose increased competition in "that incumbent's original market," "protect their market power," and "retain a monopoly or dominant position in a market." Id. at 12621-22 ¶¶ 170-174. The Commission spoke of maximizing "the opportunity for competition in *two areas* of telecommunications demonstrating a present lack of competition," id. at ¶ 172 (emphasis added), not any "related markets."

[7] Notice at ¶ 41 (emphasis added).

[8] Id. at ¶ 43 (emphasis added).

Speculating, to some degree, about the potential anticompetitive effects when dealing with competitive policy is unavoidable. On the other hand, undue speculation about potential harm can always be invoked to justify continued regulation and its accompanying (and unavoidable) influence on market development. This is especially true where, as here, the predicted "possible" harm is active predation – an anticompetitive effect noted for rarely being realized to the extent imagined. Sunsets have value in that they place a cap on such speculation and introduce certainty into the market. Yet, all value is lost when the cap is routinely reexamined and extended, not based on new evidence that the predicted harm has been realized (as feared), but on a new set of speculative fears. This is where the majority is going.

I view the new-found fears even less sustainable than the original basis for the exclusion. For one, as we have admitted, the broadband services market is nascent and the excluded incumbents cannot fairly be said to possess the same dominant position as they do with respect to their core services.[9] An incumbent phone company may be a formidable competitor, but it is not a monopolist in the broadband market, nor is cable. Moreover, these incumbents each have their own unique assets for providing broadband. Phone companies are presently expending extraordinary sums to roll out xDSL services, which include plant and infrastructure upgrades, new marketing plans, new labor requirements and the like. Similarly, and perhaps even more dramatically, cable is doing the same to build out and modernize cable plant for broadband services. It is too early to know how these technologies will turn out, let alone how LMDS will fare. As these companies spend vast sums and rush to build their existing infrastructure and build market share, I find it a bit fantastic that they would divert capital to buy up LMDS spectrum, just in case LMDS proves to be a viable broadband competitor. I reject the continuation of this exclusionary rule on that basis. We seem to operate on the view that each industry sector gets one allocated asset to compete and, if that were to fail, that is just the luck of the draw.

I firmly believe that the Commission (and proponents of extending the restriction) must make a convincing showing of proven or probable anticompetitive conduct. Consistent with similar wireless services, therefore, I believe the standard for extending the sunset should be whether there is convincing evidence that there is a "significant likelihood of substantial competitive harm in specific markets, and, if so, whether eligibility restrictions are an effective way to address that harm."[10] To support issuing this Notice, and to be consistent with our recent

---

[9] *See, e.g.*, Applications for Consent to the Transfer of Control of Licenses and Section 214Authorizations from Tele-Communications, Inc. to AT&T Corp., CS Docket No. 98-178, *Memorandum and Order*, 14 FCC Rcd. 3160, 3207 ¶¶ 92-96 (1999). The Chairman has been even more certain: "Indeed, broadband is just a nascent industry. The fact is that we don't have a duopoly in broadband. We don't even have a monopoly in broadband. We have a 'no-opoly.' The bottom line is that, most Americans don't even have broadband." Remarks by FCC Chairman William E. Kennard Before the Federal Communications Bar Northern California Chapter, San Francisco, CA, July 20, 1999 (As Prepared for Delivery).

[10] *See* Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz And 38.6-40.0 GHz Bands, ET Docket No. 95-183, RM-8553, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz, PP Docket No. 93-253, *Report and Order and Second Notice of Proposed Rule Making*, 12 FCC Rcd 18600, 18619 (1997); Amendments to Parts 1, 2 and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Notice of Proposed Rulemaking*, FCC 99-333 (released Nov. 10, 1999).

proposed rules for the 24 GHz band, I would have proposed only this higher standard instead of asserting a variety of "alternative" standards that require only mere speculation about incentives, abilities and possibilities. I would have also clearly and concisely tentatively concluded that the sunset would not be extended. This approach would have at least given some more certainty to these new licensees and their current and potential investors.

As a final matter, when we last addressed this ownership rule, I was uneasy about conducting a staff-level review to evaluate whether the Commission should extend the sunset date.[11] Although I supported full disclosure of our intentions and processes in conducting such a review, I note that this item fails to disclose that such a review has taken place and the nature of the staff's recommendations. I would encourage my colleagues to allow the parties to this proceeding to comment on the staff's report, which is the basis for re-opening this proceeding. While I will not disclose the contents of the report until the Commission decides to release it, I note that this Notice incorporates and updates the staff's findings and implements some of its recommendations without the benefit of our more recent analysis in the 1999 Cable Competition Report or the latest decision on a request under Section 271 of the Act, both of which are coming this month.[12]

Based on the foregoing, I respectfully dissent from issuing this Notice.

[11] *Third Order on Reconsideration*, 13 FCC Rcd at 4964 (*Separate Statement of Commissioner Powell*)

[12] *See* id. at 4905 ¶ 113.